DNR

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December 20, 2013

Department of Natural Resources
Private Water Systems Section – DG/2
P.O. Box 7921
Madison, Wisconsin 53707-7921

Subject: High Capacity, School or Wastewater Treatment Plant Well Approval Application
Clements Quarry #105 - Milestone Materials
T15N, R5W, Section 7, La Crosse County, Wisconsin

To Whom It May Concern:

Attached is a completed High Capacity, School or Wastewater Treatment Plant Well Approval Application form. This application is made for a high capacity well at our Clements Quarry in La Crosse County, Wisconsin. The proposed well will be used for washing crushed dolomite aggregates for use in highway projects and also to serve local customers. The well is currently planned to be drilled to approximately 570 feet and outfitted with a 50 H.P. submersible pump with a 5-inch drop pipe. The pump is planned to produce approximately 500 gpm for use within the multi-celled aggregate washing ponds. We estimate the maximum water usage per day from this well to be 720,000 gallons. This value is based upon the well producing water at a rate of 500 gpm for 24 hours. This volume of use would only occur during the initial filling of the aggregate wash ponds. A meter will be installed to accurately measure all water withdrawn from the well.

Upon completion of the initial filling of the ponds aggregate washing will commence. This washing will aid in sealing the ponds and greatly reduce percolation of the water through the base of the ponds. Once the ponds are well sealed we estimate water loss during the aggregate washing process by evaporation, and percolation to require approximately 3 hours of pumping of the well each operating day to maintain adequate water volumes in the aggregate wash ponds.

Typically the demand for washed aggregates requires washing for approximately 60 days per year. The well will initially be used to fill the aggregate wash ponds. We estimate this will require 2 full days of pumping. During the washing operation the well will be pumped for

approximately 3 hours per day for approximately 60 days. The proposed water usages from this well are as follows.

Initial Filling of the Wash Ponds:

500 gpm x 24 hours x 2 days = 1,440,000 gallons

Water Level Maintenance of the Wash Ponds:

500 gpm x 3 hours x 60 days = 5,400,000 gallons

Estimated Annual Water Use:

1,440,000 gallons + 5,400,000 gallons = 6,840,000 gallons

Average Daily Water Use per Working Day:

6,840,000 gallons / 62 working days = 110,323 gallons

If you have any questions or concerns about this application please do not hesitate to contact me at (608) 779-6608 or via email at andrew.peters@mathy.com.

Thank you,

Milestone Materials – A Division of Mathy Construction
Andrew Peters, Geologist

Enclosure

State of Wisconsin
Department of Natural Resources
Private Water Systems Section - DG/2
dnr.wi.gov

High Capacity, School or Wastewater Treatment Plant Well Approval Application

Form 3300-256 (R 7/05)

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Notice: Prior department approval is required for the construction, reconstruction or operation of a high capacity well or system of high capacity wells, a school well or a wastewater treatment plant well in accordance with Section NR 812.09(4)(a), Wisconsin Administrative Code. Personally identifiable information collected on this form, including such data as your name, address and phone number, will be used for management of department programs and is unlikely to be used for other purposes. This information will be addressable under Wisconsin's Open Records Laws, ss. 19.32 - 19.39, Wis. Stats.

Use this form to request an approval for installation of a well or wells on a high capacity property, seek approval to make other changes to a high capacity property or to modify a well on a high capacity property, as required by NR 812.09(4)(a), Wisconsin Administrative Code. Refer to definitions of high capacity well, high capacity property and high capacity well system on page 5.

This form is not intended to be used when seeking approval for construction or modification of wells serving water systems regulated under ch. NR 811, Wis. Adm. Code. Any water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartments, 10 or more condominiums, or 10 or more duplexes is regulated under ch. NR 811, Wis. Adm. Code. See NR 811.01, Wis. Adm. Code for applicability requirements.

Applicant Information

Application Prepared By (Name and Title)	Company		
Andrew Peters	Milestone Materials		
Street Address	**City**	**State**	**ZIP Code**
920 10th Avenue North	Onalaska	WI	54650
Telephone Number	**Fax Number**	**E-Mail Address**	
608-779-6608	608-779-9182	andrew.peters@mathy.com	

Property Ownership Information

Property owner, if different than applicant (Name of Person and Title)	Company		
Street Address	**City**	**State**	**ZIP Code**
Telephone Number	**Fax Number**	**E-Mail Address**	

Well Operator Information

Well operator if different than owner (Name of Person and Title)	Company		
Street Address	**City**	**State**	**ZIP Code**
Telephone Number	**Fax Number**	**E-Mail Address**	

Property Information

Enter the High Capacity Well File Number below if the property is already a high capacity property. If the property is not designated as a high capacity property at the time of application, enter "NONE." NOTE: Find the file number in upper right hand corner of the most recent high capacity well approval, or use the compact disk of departmental well data that is issued to drillers and pump installers. On the compact disk, see "File location" in red print in "Location" section. File number format is as follows: (1 or 2 digits for county) - (1 digit for well classification) - (1 to 4 digits for assigned property no.).

County	Town	High Capacity Well File No.
~~None~~ La Crosse		

Submittal Purpose

Check all that apply:

- [x] Install one or more new wells with a capacity greater than 70 gallons per minute.
- [ ] Install one or more new wells with a capacity less than 70 gallons per minute on a high capacity property.
- [ ] Replace one or more wells with a capacity greater than 70 gallons per minute.
- [ ] Replace one or more wells with a capacity less than 70 gallons per minute on a high capacity property.
- [ ] Reconstruct one or more wells with a capacity greater than 70 gallons per minute.
- [ ] Reconstruct one or more wells with a capacity less than 70 gallons per minute on a high capacity property.
- [ ] Increase pumping rate in one or more wells to a rate greater than previously approved.
- [ ] Request continued operation of high capacity wells after a change in ownership. (No application fee required.)
- [ ] Renew a previous approval that has expired.
- [ ] Well (or wells) will serve a school or wastewater treatment plant. See definitions on page 5.
- [ ] Other, explain _____

Site Status Information

Determine the site status using the internet or the compact disk of departmental well data that is issued to drillers and pump installers and the information supplied by the property owner. Internet address is dnr.wi.gov/org/water/dwg/dws.htm. Enter YES or NO for each of the following questions.

YES NO

☐ ☑ Has the property boundary changed since the most recent high capacity well approval was issued? If the property is not yet a high capacity property, check NO.

☐ ☑ Has there been a change in well ownership since the last approval was written?
If YES, name of current owner: Date of purchase:

☐ ☑ Has there been a change in well operator since the last approval was written?
If YES, name of current operator: Date of change:

☐ ☑ Will a proposed well be connected to a plumbing system that is supplied by other sources (other wells, municipal supply, etc.)? If YES, include a schematic drawing showing backflow protection.

☐ ☑ Is a proposed well within 1,200 feet of a landfill? Determine if there are any landfills nearby, using the well information compact disk FIND feature. Enter the township, range and section of the well location. If the well is near a section line, also check the adjacent section or sections.
If YES, list the landfill site ID Number: OR Landfill location: (Township/Range/Section)

☐ ☑ Is a proposed well on a property that has a contaminated site? If YES, list the BRRTS (Bureau for Remediation and Redevelopment Tracking System) Number here and specify if the site is open or closed:
☐ Open ☐ Closed

☐ ☑ Is a proposed well on a property that has a groundwater use restriction recorded on the deed? If YES, list the BRRTS number, as assigned to the contaminated site by the DNR remediation and redevelopment program:

☐ ☑ Is a proposed well on a property that is listed on the department's registry of closed remediation sites for a groundwater use restriction? See compact disk or internet at maps.dnr.state.wi.us/imf/dnrimf.jsp?site=brrts. If YES, list the BRRTS Number here:

☐ ☑ Is a proposed well to be used for a public water supply system that serves 25 or more people? See definition of a "public water system" in the definitions section on page 5.

☐ ☑ Is a proposed well to be installed within a special casing area? Refer to the list of special casing areas that is published by the department and/or contact the regional DNR office.

☐ ☑ Has the number of wells or pumping capacity in an existing well increased since the most recent high capacity well approval was issued?

☐ ☑ Has the number of wells decreased since the most recent high capacity well approval? If the property is not yet a high capacity property, check NO.

☐ ☑ Is a non-pressurized storage vessel (i.e. reservoir) other than a pond proposed or in use?

☑ ☐ Will the well discharge directly to a storage pond?

☐ ☑ Is a pressurized tank with a capacity greater than 1,000 gallons proposed or in use?

☑ ☐ Is a proposed well within 1,200 feet of a quarry?

☐ ☑ Is a proposed well located in a floodplain or floodway?

☐ ☑ Are any existing well installations on the high capacity property out of compliance with Chapter NR 812, Wisconsin Administrative Code?

☐ ☑ Will the well be used as a source of bottled water?

☐ ☑ Are you seeking a variance to construct a well that has a capacity of less than 70 gallons per minute to low capacity well construction standards?

☐ ☑ Is the property served by a community water system?

Existing Well Information

Enter the following information on all **existing** wells on the property, if more than four wells, submit additional sheets:

Well Name Assigned by Well Owner (North Well, etc.):	None			
Well Number Assigned by Owner (001, 002, etc.):				
WI Unique Well Number or NA if no number:				
Permanent DNR High Capacity Well Number or N/A if none:				
Public Water System ID Number, if Public (if not public, NONE):				
Potable or Non-Potable Use:				
Type of Well (Irrigation, Industrial, Residential, etc.):				
Requested Average Water Usage per Day in Gallons:				
Requested Maximum Water Usage per Day in Gallons:				
Seasonal? (April to October, Year Around, etc.):				
Approved Pumping Capacity if Previously Approved (gpm):				
Current Pump Type & Capacity (gpm):				
Proposed Pump Type & Capacity If Change Requested (gpm):				
Pump Discharge Type (Over Top of Casing Seal, Pitless, etc.):				
Discharge Location (Building Pressure Tank, Pond, etc.):				
Height of Well Casing Above Ground in Inches:				
Potential Contaminant Sources and Distance:				
Well Loc: Quarter Quarter Section	1/4 of 1/4	1/4 of 1/4	1/4 of 1/4	1/4 of 1/4
or Government Lot Number				
Section or French Long Lot No.				
Township:	T N	T N	T N	T N
Range (Select E or W):	R ☐E ☐W	R ☐E ☐W	R ☐E ☐W	R ☐E ☐W
Latitude (Degrees and Minutes)	° '	° '	° '	° '
Longitude (Degrees and Minutes)	° '	° '	° '	° '
GPS Map Datum (WGS84, WTM91, etc.)				

Include as much of the following information as practical for wells that do not have well construction records attached to the application, however if the well construction record is attached, applicant may leave the following rows blank.

Date of Construction:				
Drilled by (Name of Drilling Firm):				
Drilling Method(s) (Rotary, Percussion, Etc.)				
Well Depth in Feet:				
Upper Enlarged Drillhole Diameter in Inches and Depth in Feet:	inches, feet	inches, feet	inches, feet	inches, feet
Lower Drillhole Diameter in Inches and Depth in Feet:	inches, feet	inches, feet	inches, feet	inches, feet
Well Casing Diameter in Inches and Depth in Feet:	inches, feet	inches, feet	inches, feet	inches, feet
Well Casing Material and Wall Thickness:				
Annular Space Material Between Casing and Drillhole Wall:				
Is There a Well Screen (Y or N) If so, Screen Material?:				

Proposed Well Information

Enter the following information on all **proposed** wells on the property, if more than two wells or alternate construction, submit additional sheets:

Well Name Assigned by Well Owner (North Well, etc.):	Clements Quarry Well #1	
Well Number Assigned by Owner (001, 002, etc.):	001	
Well Loc: Quarter Quarter Section or French Long Lot Number	SW 1/4 of NE 1/4 of Section 7	1/4 of 1/4 of Section
or Government Lot Number		
Township & Range (Select E or W)	T 15 N, R 5 ☐E ☑W	T N, R ☐E ☐W
Latitude (Degrees and Minutes)	43 ° 47.566 '	__ ° __.___ '
Longitude (Degrees and Minutes)	091 ° 01.062 '	___ ° __.___ '
GPS Map Datum (WGS84, WTM91, etc.)	WGS 84	
Type of Well (Irrigation, Industrial, Residential, etc.):	Type: Industrial Aggregate Washing ☐Potable ☑Non-Potable	Type: ☐Potable ☐Non-Potable
Drilling Method(s) (Rotary, Percussion, Etc.):	Rotary	
Anticipated Geological Materials and Depths that Are Expected During Drilling:		
Material and Depth Interval:	Dolomite from 0 ' to 180 '	from 0 ' to '
Material and Depth Interval:	Sandstone from 180 ' to 270 '	from ' to '
Material and Depth Interval:	Sandstone/Shale from 270 ' to 470 '	from ' to '
Material and Depth Interval:	Sandstone from 470 ' to 570 '	from ' to '
Material and Depth Interval:	from ' to '	from ' to '
Drillhole Diameter and Anticipated Depth Intervals:		
Diameter and Depth Interval:	15" from 0 ' to 350 '	from ' to '
Diameter and Depth Interval:	10" from 350 ' to 570 '	from ' to '
Diameter and Depth Interval:	from ' to '	from ' to '
Permanent Casing or Liner Diameter and Wall Thickness at Anticipated Depth Intervals:		
Diameter and Wall Thickness at Depth Interval:	10 " diam/ 0.250 " thick 0 ' to 300 '	" diam/ " thick 0 ' to '
Diameter and Wall Thickness at Depth Interval:	" diam/ " thick ' to '	" diam/ " thick ' to '
Permanent Casing or Liner Material , If Used:		
Casing Joints (Welded, T and C, etc.)	Welded	
Material and Weight at Depth Interval:	Steel 128 lbs/foot 0 ' to 300 '	/ lbs/foot 0 ' to '
Material and Weight at Depth Interval:	/ lbs/foot ' to '	/ lbs/foot ' to '
Screen Material, Slot Size in Inches and Depth Interval or N/A if none:	N/A / "/ ' to '	/ "/ ' to '
Casing to Screen Joint (Welded, T and C, K Packer, etc.)	N/A	
Annular Space Material Including Filter Pack Material, If Used:		
Material and Depth Interval:	Cement Grout / 0 ' to '	/ 0 ' to '
Material and Depth Interval:	/ ' to '	/ ' to '
Proposed Average Water Usage Per Day in Gallons:	110,323	
Proposed Maximum Water Usage Per Day in Gallons:	720,000	
Seasonal? (April to October, Year Around, etc.):	Year Around	
Proposed Pump Type & Capacity (gpm):	50 HP Submersible, 500 GPM	
Discharge Type (Over Top of Casing Seal, Pitless Adapter or Unit):	Over Top of Casing Seal	
Discharge Location (Building Pressure Tank, Pond, etc.):	Pond	
Distance and Direction to Nearest Public Utility Well & Well Name:	1 mile west (City of St. Joseph)	
Distance to Other Potential Contaminant Sources:	≈2 miles south (Washington Twp Landfill)	
Distance to Other Potential Contaminant Sources:	≈3 miles SW (Greenfield Twp Landfill)	
Leave Blank, for Department use only		

Required Attachments

1. Attach one of the maps described in A. or B., below. Plot the existing and proposed well locations on the map. For wells that have a Wisconsin Unique Well Number or a Permanent High Capacity Well Number, plot the well locations with one of those numbers.
   A. Copy of a plat map with the property boundary clearly shown. If the property is contiguous with properties owned by the same owner in another township, include a copy of that township map too, showing the property boundaries. If the property owner listed on the plat map is different from the current owner, list the date or dates, that the current property owner purchased the property on the map.
   B. Map of the property prepared by a licensed land surveyor and the property description as described by the surveyor.
2. Sketch map showing all of the following that are planned or exist within 300 feet of each proposed well: proposed well location; other wells; property boundary; wetlands; potential contaminant sources (septic tank and drainfield, petroleum storage tanks, sewer lines, etc.); buildings and north arrow. If no pertinent features to map within 300 feet of the proposed well, for example an irrigation well in the middle of a field, state that on the property map listed above and plot the well locations on that map.
3. Any well construction records available for existing wells on the property. Do not attach any well construction records for wells that are not on the property. If a Wisconsin Unique Well Number has not been assigned, write a well name or site well number on the record that correlates to the well name or number plotted on the maps.
4. For proposed wells with a capacity greater than 400 gallons per minute, include the performance curve or performance table that is provided by the pump manufacturer. If the pump will be a lineshaft turbine, provide a curve with the same rpm as the motor under full load and list the motor horsepower.
5. If more than one well is connected to a common plumbing system, also provide a schematic drawing of the system showing method of preventing backflow. This sketch must include the well discharge (pitless, over top of casing sanitary seal); the water line from the well; pressure tanks; sampling faucets; check valves; backflow preventers; air gaps; manually operated valves; water meters; pressure switches for pumps; and any other pertinent fittings. This schematic drawing must also identify which of these components are buried or above ground. If there is more than one check valve within the well casing, include in-well check valves on the schematic.
6. If reconstruction of an existing well is proposed, include a diagram of the current well construction and a diagram of the proposed construction.
7. If the application is for a high capacity well or wells, a $500.00 check payable to the Department of Natural Resources, unless the application is only for continued operation after a change of ownership.

Certification and Applicant Signatures

If the application requests a variance for a well within 1,200 feet of a landfill, a well on a property with a groundwater use restriction, or any other variance to NR 812, Wis. Adm. Code, the property owner must sign the application. If the well operator will install a well on property that he or she does not own, the property owner must also sign the application. Otherwise, an agent of the owner may sign the application.

Unsigned and incomplete applications will not be approved.

By signing this form, the person signing this application certifies that to the best of his or her knowledge, all existing well installations on the property comply with ch. NR 812, Wis. Adm. Code. The person also certifies that to the best of his or her knowledge, all information in the application is accurate and correct.

Name - Print	Check Box	
Andrew Peters	☐ Owner	☑ Agent of the Owner

Signature	Company	Date
AL RE	Milestone Materials	12/20/2013

Application submittal. Mail completed application and payment with all required attachments to DNR, Private Water Systems Section - DG/2, PO Box 7921, Madison WI 53707-7921.

Definitions from Wisconsin Administrative Codes

"High capacity well" means a well constructed on a high capacity property. [NR 812.07(51)]

"High capacity property" means one property on which a high capacity well system exists or is to be constructed. [NR 812.07(52)]

"High capacity well system" means one or more wells, drillholes or mine shafts used or to be used to withdraw water for any purpose on one property, if the total pumping or flowing capacity of all wells, drillholes or mine shafts on one property is 70 or more gallons per minute based on the pump curve at the lowest system pressure setting, or based on the flow rate. [NR 812.07(53)]

"Public water system" means a system for the provision to the public of piped water for human consumptions if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year. A public water system is either a community water system or a non-community water system. Such system includes: (a) Any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (b) Any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. [NR 812.07(80)]

"School" means a public or private educational facility in which a program of educational instruction is provided to children in any grade or grades from kindergarten through the 12th grade. Water systems serving athletic fields, school forests, environmental centers, home-based schools, day-care centers and Sunday schools are not school water systems. [NR 812.07(94)]

"Wastewater treatment plant" means any facility provided for the treatment of sanitary or industrial wastewater or both. The following types of facilities are excluded: (a) Facilities defined as private sewage systems in s. 145.01(12), Stats. (b) Pretreatment facilities from which effluent is directed to a public sewer system for treatment. (c) Industrial wastewater treatment facilities which consist solely of a land disposal system. [NR 114.03(14)]

Other Information

Use for schematic drawings, sketch maps or other information.

WASHINGTON

T-15-N • R-5-W

LANDOWNER FHP

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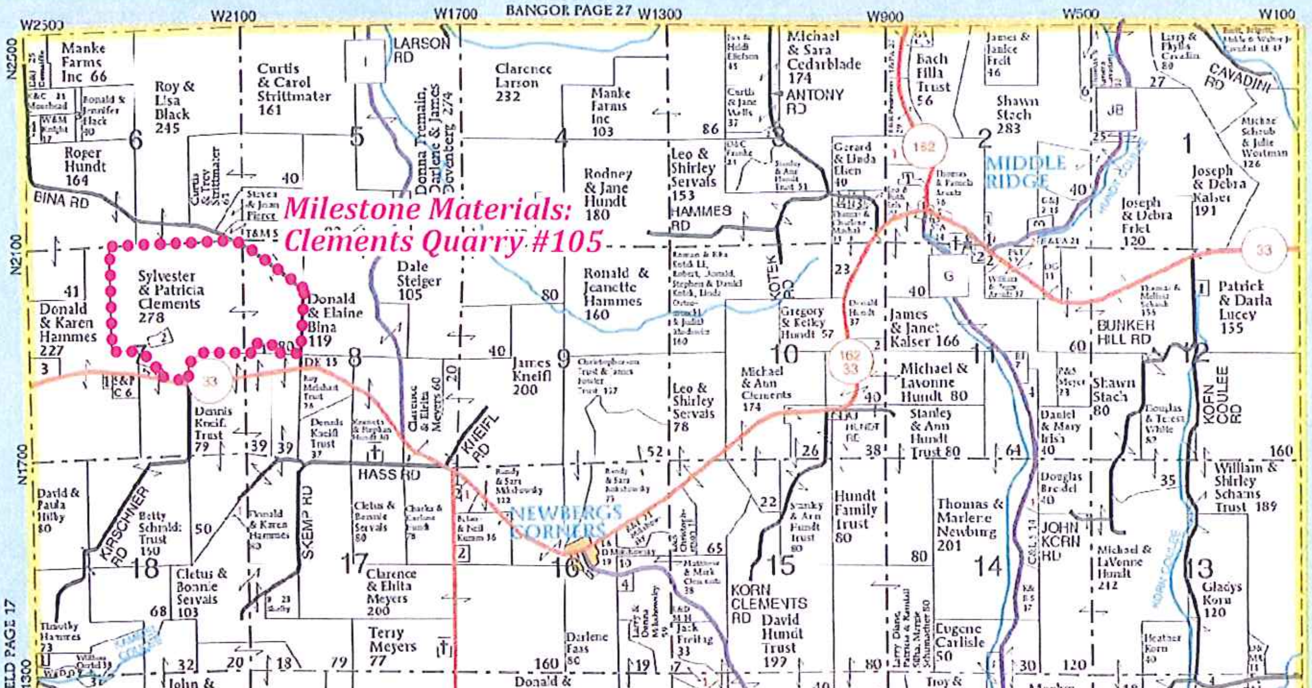
LA CROSSE COUNTY

See Pages 62 & 63 For Additional Names.



High Capacity Well Approval Application

Clements Quarry #105
Section 7, T15N, R5W
La Crosse County, WI